

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U1 Scrubber system controlling emissions from foundry cupola
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
55	Maximum amount of non-hazardous used oil burned in the cupola based on the preconstruction permit. Non-hazardous used oil <=1000 gallons/month. [N.J.A.C. 7:27-22.16(e)]	Other: Monitored by non-hazardous oil feed rate each occurrence during operation.	Other: Keep records of non-hazardous oil burned in the cupola per occurrence by manual logging. [N.J.A.C. 7:27-22.16(e)]	None.
56	Maximum sulfur content of the non-hazardous used oil burned in the cupola based on the preconstruction permit. Sulfur content of waste oil <=0.5% by weight. [N.J.A.C. 7:27-22.16(e)]	Other: Sulfur content of non-hazardous waste oil initially. [N.J.A.C. 7:27-22.16(o)]	Other: Keep certificate of analysis showing sulfur content of the non-hazardous used oil. [N.J.A.C. 7:27-22.16(o)]	None.
57	The waste paint and used oil to be burned in the cupola shall only be process from on-site generated sources. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
58	Wood pallets may only be burned in the cupola when broken or when they become unacceptable for reuse by companies which routinely supply the permittee. The source of these broken wood pallets shall be the permittee's site in Phillipsburg exclusively. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
59	Maximum allowable VOC emissions, percent of process emissions by weight <15%. [N.J.A.C. 7:27-16.16(d)]	Other: Maintain process records to demonstrate that the VOC emission rate from actual operations do not exceed the permitted emission rate. [N.J.A.C. 7:27-16.16(g)1ii]	Other: Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operation does not exceed the VOC emission rate under worst case operating conditions. Once initially. [N.J.A.C. 7:27-16.16(g)2ii]	None.

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Subject Item U1 Scrubber system controlling emissions from foundry cupola
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
60	Maintain the records required by [N.J.A.C. 7:27-16.16(g)] for a period of no less than five years. [N.J.A.C. 7:27-16.22(a)]	None.	Other: Manual logging of parameter. Records to be filed or readily accessible computer memory. [N.J.A.C. 7:27-16.22(a)]	None.
61	The permittee shall implement a mercury minimization program, including setting specifications for scrap which will minimize mercury in the scrap, and maintain records of scrap deliveries. [N.J.A.C. 7:27-22.16(a)]	Other: Monitor scrap, per delivery. [N.J.A.C. 7:27-22.16(o)]	Other: Maintain a list of scrap deliveries with the date of each delivery, the general type and amount of scrap received, and the name of the supplier. Notify each scrap supplier that: (1) the scrap must conform with the permittee's mercury specifications; (2) mercury must be removed from the scrap, if any (for example mercury switches). Records of scrap deliveries and scrap supplier notifications shall be maintained at the permittee's facility.	None.
62	The carbon monoxide and oxygen monitors shall comply with the provisions of 40 CFR 60 Appendix B an F. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

Possible acceptable language for mercury requirements.

**New Jersey Department of Environmental Protection
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Subject Item U2 Core machines molding sand cores
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum allowable particulate emission rate based on 99% collection efficiency <=2.72 lb/hr for all sources. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Visible emission not greater than 20% opacity, exclusive of visible condensed water vapor, except for three minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	Operating pressure drop range for baghouse CD5, from operating permit application. Pressure drop >=1 and pressure drop <=6 inches w.c. [N.J.A.C. 7:27-22.16(a)]	Monitored by pressure drop instrument continuously, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by manual logging of pressure drop once per month. [N.J.A.C. 7:27-22.16(o)]	
4	Maximum annual emission from preconstruction permit. TSP <=0.54 tons/year. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	Maximum annual emission from preconstruction permit. PM-10 <=0.54 tons/year. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
6	Maximum operating hours is limited to 4000 hours/year per piece of equipment. [N.J.A.C. 7:27-22.16(e)]	Monitored by production records. [N.J.A.C. 7:27-22.16(o)]	Other: Record keeping by manual logging of hours of operation monthly. [N.J.A.C. 7:27-22.16(o)]	None.
7	Raw material (coated sand) processing rate for all core molding machines <= 57 tons daily maximum total usage for all machines [N.J.A.C. 7:27-22.16(e)]	Monitored by production records. [N.J.A.C. 7:27-22.16(o)]	Other: Record keeping by manual logging for all core molding machines monthly. [N.J.A.C. 7:27-22.16(o)]	None.

Monitor only the total average sand used each day based on monthly records of usage. Since the emissions all go to the baghouse it doesn't seem necessary to impose any more restrictive or burdensome requirements.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.1

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.2

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.3

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.4

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.5

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.6

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

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Facility Specific Requirements**

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No. 7

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 \leq 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP \leq 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.8

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP ≤ 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Changed allowable emissions from 0.064 to 0.057 lbs/hr for 9 vs. 8 core machines.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U2 Core machines molding sand cores
Operating Scenario: OS1 Core Molding Machine No.9

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission rate from operating permit application. PM-10 \leq 0.057 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Maximum emission rate from preconstruction permit. TSP \leq 0.057 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Add Core Molding Machine No. 9

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum allowable particulate emission rate based on 0.02 grains per SCF=25.6 lb/hr. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Opacity <=20% except for emissions which are greater than 20% opacity, exclusive of condensed water vapor, for a period of not longer than three (3) minutes in any consecutive 30-minute period. [N.J.A.C. 7:27-6.2(d)]	None.	None.	None.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
3	The permittee shall not use the equipment in a manner which will cause visible emissions to exceed 10%, except for a period of 30 minutes during startup and shutdown when opacity shall not exceed 20%, exclusive of condensed water vapor. [N.J.A.C. 7:27-22.16(e)]	Monitored by visual determination each week during operation, based on an instantaneous determination. The permittee shall conduct visual opacity inspections during daylight hours. Visual inspections shall consist of a visual survey to identify if the stack has visible emissions, (other than condensed water vapor), greater than the prescribed standard. If visible emissions are observed, the permittee shall do the following: (1) Verify that the equipment causing the emission is operating according to the manufacturer's specifications and the operating permit. If the equipment is not operating properly, the permittee shall take corrective action immediately to eliminate the excess emissions. The permittee must report any permit violation to NJDEP pursuant to N.J.A.C. 7:27-22.19. (2) If the corrective action taken in step one does not correct the opacity problem within 24 hours, the permittee shall perform a check via a certified opacity reader, in accordance with N.J.A.C. 7:27B-2. Such a test shall be conducted once a day until corrective action is taken to successfully correct the opacity problem. [N.J.A.C. 7:27-22.19] and [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter each week during operation. The permittee must retain the following records: (1) Date and time of inspection; (2) Emission point number; (3) Operational status of equipment; (4) Observed results and conclusions; (5) Description of corrective action taken if needed; (6) Date and time opacity problem was solved, if applicable; (7) N.J.A.C. 7:27b-2 results if conducted; and (8) Name of person(s) conducting inspection. [N.J.A.C. 7:27-22.16(o)]	None.
4	Maximum annual emission rate from preconstruction permit TSP <=9.43 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
5	Maximum annual emission rate from preconstruction permit Carbon Monoxide <=36 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Note Recordkeeping change.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
6	Maximum annual emission rate from preconstruction permit PM10 (total) <=9.43 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	Maximum annual emission rate from preconstruction permit SO2 <=30.15 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
8	Maximum annual emission rate from preconstruction permit Nitrogen Oxides <=8.53 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Maximum annual emission rate from preconstruction permit VOC (total) <=61.2 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	Maximum annual emission rate from preconstruction permit HAPs (total) <=0.070 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
11	Maximum annual emission rate from preconstruction permit Chromium Emissions <=0.002462 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Maximum annual emission rate from preconstruction permit Lead Emissions <=0.0217 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Maximum annual emission rate from preconstruction permit Nickel Emissions <=0.04622 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Emission shall vent to the baghouse central device based on preconstruction permit application. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

NJDEP may require these changes be made via a subchapter 8 permit modification.

New Jersey Department of Environmental Protection
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Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
15	The permittee shall conduct bag cleaning, maintenance and replacement on a schedule necessary to achieve the required particulate removal efficiency as specified by the manufacturer based on preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. The permittee shall record each instance of bag maintenance and bag replacement. [N.J.A.C. 7:27-22.16(e)]	None.
16	The pressure drop across the Baghouse, CD4, from the preconstruction permit. Pressure drop across Baghouse <=6 inches of w.c. and pressure drop across the Baghouse >=1 inches of w.c. [N.J.A.C. 7:27-22.16(e)]	Monitored by pressure drop Instrument continuously, based on an instantaneous determination. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by manual logging of parameter once per day during operation. [N.J.A.C. 7:27-22.16(e)]	None.
17	Maximum emission rate from operating permit application. PM-10 (total) =5.24 lb/hr. [N.J.A.C. 7:27-22.16(e)] Note: PM10 stack test: Front half sampling train only.	None.	None.	None.
18	Conduct comprehensive stack test every five years prior to submitting the operating permit renewal application. [N.J.A.C. 7:27-22.16(o)]	Monitored by stack emission testing every 5 years, based on any 60 minute period. (See subject item PT-3 Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results at no required frequency. (See subject item PT-3 Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]

Note PM10 Stack Sampling Condition

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submission/Action Requirement
19	Particulate Control Efficiency >=99% from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None	None	None.
20	Maximum emission rate from preconstruction permit. Sulfur Dioxide (SO ₂) <=16.75 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results at no required frequency. (See subject item PT-3 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test – Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]

Note changes.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
21	Maximum emission rate from preconstruction permit. TSP (total) ≤ 5.24 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(e)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]
22	Maximum emission rate from preconstruction permit. Carbon Monoxide (CO) ≤ 20 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]

Note changes.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
23	Maximum emission rate from preconstruction permit. Nitrogen Oxides (NOX) <=4.74 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. # 1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test – Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]
24	Maximum emission rate from preconstruction permit. VOC (total) <=34 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. # 1 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test – Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]
25	Maximum emission rate from preconstruction permit. HAPs (total) <=0.0391 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Note changes.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
26	Maximum emission rate from preconstruction permit. Lead emissions <=0.0121 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]
27	Maximum emission rate from preconstruction permit. Chromium emissions <=0.001368 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]

Note changes.

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Facility Specific Requirements

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
28	Maximum emission rate from preconstruction permit. Nickel emissions ≤ 0.02568 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. (See subject item PT-3, Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule, a protocol to conduct stack test shall be submitted to the Bureau of Technical Services (BTS), at PO Box 437, Trenton, NJ 08625-0437, at least one year prior to submitting Operating Permit renewal application. Upon protocol approval, the applicant must schedule a mutually acceptable test date with BTS. The stack test report must be submitted within 45 days after performing the stack test. [N.J.A.C. 7:27-22.16(o)] The department may approve an extension for the stack test results submittal. [N.J.A.C. 7:27-22.19(d)]
29	Total Production Rate ≤ 75 tons/hr from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Monitored by gravimetric monitoring once per cupola charge during operation, based on hourly averaging period. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter once per hour during operation. [N.J.A.C. 7:27-22.16(o)]	None.
30	Te production hours are limited to 3600 hours/year per piece of equipment. [N.J.A.C. 7:27-22.16(e)]	Monitored by hourly production record. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter daily. [N.J.A.C. 7:27-22.16(o)]	None.

Note changes.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U3 Melt Center Baghouse controlling launder & ladle emissions
Operating Scenario: OS1 Iron launder conveying molten iron to ladle

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Raw material (iron) processing rate from preconstruction permit <=150,000 lb/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by gravimetric monitoring once per cupola charge during operation, based on hourly averaging period. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter daily. [N.J.A.C. 7:27-22.16(o)]	None.

Note changes.

Should other sources (OSs) be included? e.g. ladles, casting machines etc. from preconstruction permit.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U4 Annealing Oven for Cast Pipe
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum allowable particulate emission rate based on 0.02 gr. per SCF=0.5 lb/hr. [N.J.A.C. 7:27-6.2(a)]	None.	None.	None.
2	Opacity <=20% except for emissions which are greater than 20% opacity, exclusive of condense water vapor, for a period of not longer than three (3) minutes in any consecutive 30 minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
3	Maximum Gross heat input from operating permit application = 91.3 MMBTU/hr. [N.J.A.C. 7:27-22.16(A)]	Other: Fuel burner rated capacity. [N.J.A.C. 7:27-22.16(o)]	None.	None.
4	Raw material processing rate from operating permit application <=150,000 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	Inspect the burner(s), and clean or replace any components of the burner(s) as necessary to minimize total emissions of NOx and Carbon Monoxide (CO). [N.J.A.C. 7:27-19.13(n)]	None.	None.	None.
6	Inspect the flame pattern and make any adjustments to the burner(s) necessary to optimize the flame pattern and inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly. [N.J.A.C. 7:27-19.13(n)]	None.	None.	None.
7	Maximum annual emission rate based on 271 MMcf/yr annual natural gas usage from operating permit application. VOC <= 0.195 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

Since natural gas consumption, not pipe throughput determines the emissions there is no reason for monitoring or record keeping requirements.

New Jersey Department of Environmental Protection
Facility Specific Requirements

Subject Item U4 Annealing Oven for Cast Pipe
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
8	Maximum annual emission rate based on 271 MMbt ³ annual natural gas usage from operating permit application. PM-10 <=0.070 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
9	Maximum annual emission rate based on 271 MMbt ³ annual natural gas usage from operating permit application. SOx <=0.042 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	Maximum annual emission rate based on 271 MMbt ³ annual natural gas usage from operating permit application. TSP <=0.070 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	Maximum annual emission rate based on 271 MMbt ³ annual natural gas usage from operating permit application. NOx <=9.73 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
12	Maximum annual emission rate based on 271 MMbt ³ annual natural gas usage from operating permit application. CO <=2.433 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Maximum annual emission rate based from operating permit application. PM-10 <=0.039 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
14	Maximum annual emission rate based from operating permit application. TSP <=0.039 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
15	Maximum annual emission rate based from operating permit application. NOx <=5.406 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
16	Maximum annual emission rate based from operating permit application. CO <=1.351 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U4 Annealing Oven for Cast Pipe
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
17	Maximum annual emission rate based from operating permit application. VOC <= 0.108 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
18	Natural Gas Usage <= 271 MMbtu ³ Maximum annual fuel usage rate from NOx control plan based on any 12 consecutive months. [N.J.A.C. 7:27-19.13(n)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis) [N.J.A.C. 7:27-19.13(n)] & [N.J.A.C. 7:27-22.16(o)]	Other: Recordkeeping by manual logging fuel usage monthly or computer data entry. [N.J.A.C. 7:27-19.13(n)] & [N.J.A.C. 7:27-22.16(o)]	None.
19	Fuel type is limited to natural gas only from NOx control plan. [N.J.A.C. 7:27-19.13(n)]	None.	None.	None.
20	Adjust the combustion process in accordance with N.J.A.C. 7:27-19.16 each calendar year. Record this adjustment event. [N.J.A.C. 7:27-19.13(n)]	None.	Other: Record the date of the adjustment and the times at which it began and ended; the name, title and affiliation of the person who made the adjustment. [N.J.A.C. 7:27-22.16(o)]	None.
21	An exceedance of an emission limit which occurs, during an adjustment of the combustion process is not a violation of this approval. Before the combustion adjustment begins, and after it has been completed, the maximum NOx emission rate based on NOx control plan of NOx shall not exceed 0.15 lbs/MMBTU. [N.J.A.C. 7:27-19.13(n)]	None.	None.	None.
22	The emission rates of nitrogen oxides (NOx) from Annealing Oven shall not exceed 0.15 lbs/MMBTU, from the approved NOx Control Plan. [N.J.A.C. 7:27-19.13(n)]	None.	None.	None.

Note: The Annealing Oven does not have a common stack venting outside the building. There are (4) vents located on top of the Annealing Oven that discharge inside the building at temperatures above 1000 deg. F. There is no viable means to conduct sampling to verify burner performance.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U4 Annealing Oven for Cast Pipe
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
23	Maximum allowable rate for VOC <=3.5 lb/hr. [N.J.A.C. 7:27-16.16(c)]	Other: Maintain process records to demonstrate that the VOC emission rate from actual operations do not exceed the permitted emission rate. [N.J.A.C. 7:27-16.16(g)ii]	Other: Conduct an analysis of the source operation, which demonstrates that, under worst case operating conditions that maximize the VOC emissions after any control, the VOC emission rate of the source operation is in compliance with this section; and maintain process records sufficient to demonstrate whether the VOC emission rate of the source operation from actual operations does not exceed the VOC emission rate under worst case operating conditions. [N.J.A.C. 7:27-16.22(a)]	None.
24	Maintain the records required by N.J.A.C. 7:27-16.16(g) for a period of no less than five years. [N.J.A.C. 7:27-16.22(a)]	None.	Other: Manual logging of parameter. Records to be manually logged or readily accessible in computer memory. [N.J.A.C. 7:27-16.22(a)]	None.

Note changes.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U6 Finishing Baghouse – Cutting the pipe, grinding the bell and removal of sand
Operating Scenario: OS Summary

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Visible emission not greater than 20% opacity, exclusive of visible condensed water vapor, except for three minute period. [N.J.A.C. 7:27-6.2(d)] & [N.J.A.C. 7:27-6.2(e)]	None.	None.	None.
2	Maximum annual particulate emission limit from preconstruction permit TSP <=2,363 tons/year. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
3	Maximum annual emission limit from operating permit application of PM-10 <=2,363 tons/year. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	Operating pressure drop range across the baghouse based on preconstruction permit. Pressure drop >=2 and pressure drop <=6 inches w.c. [N.J.A.C. 7:27-22.16(e)]	Monitored by pressure drop instrument continuously, based on an instantaneous determination during operation. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter once per operating shift. [N.J.A.C. 7:27-22.16(o)]	None.
5	The permittee shall conduct bag cleaning, maintenance and replacement on a schedule necessary to achieve the required particulate removal efficiency as specified by the manufacturer. [N.J.A.C. 7:27-22.16(e)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event. The permittee shall record each instance of bag maintenance and bag replacement. [N.J.A.C. 7:27-22.16(e)]	None.
6	Control efficiency of the particulate control system from preconstruction permit = 99.9%. [N.J.A.C. 7:27-22.16(e)]	None.	Other: Particulate Control efficiency – Recordkeeping by manual logging of parameter once initially. The permittee shall keep records of the manufacturer's information showing the minimum design efficiency. [N.J.A.C. 7:27-22.16(e)]	None.
7	Maximum hours of operation <=3600 hr/year from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	Monitored by production records. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter once per shift during operation. [N.J.A.C. 7:27-22.16(o)]	None.
8	Maximum production rate from preconstruction permit <=75 tons/hr. [N.J.A.C. 7:27-22.16(e)]	Monitored by production records. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter once per shift during operation. [N.J.A.C. 7:27-22.16(e)]	None.

Control efficiency covered by No. 6, therefore original No. 1 not needed.

**New Jersey Department of Environmental Protection
Facility Specific Requirements**

Subject Item U6 Finishing Baghouse – Cutting the pipe, grinding the bell and removal of san
Operating Scenario: OS1 Reamer – Reaming Interior of Rework Pipe

Date: 1/30/2003

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission limit from preconstruction permit. TSP (cement) ≤ 3.72 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	Maximum emission limit from operating permit application. PM10 ≤ 3.72 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Raw materials are limited to Cement, Sand and Dry asphalt from preconstruction permit. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

**New Jersey Department of Environmental Protection
 Facility Specific Requirements**

Subject Item U6 Finishing Baghouse – Cutting the pipe, grinding the bell and removal of sand
 Operating Scenario: OS2 Bell Grinder – grinding the bell of the pipe

Ref. #	Applicable Requirement	Monitoring Requirement	Record Keeping Requirement	Submittal/Action Requirement
1	Maximum emission limit from preconstruction permit. TSP <=0.053 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
2	Maximum emission limit from operating permit application. PM10 <=0.053 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Raw material percentages from operating permit application: Iron = 99.98% Sand = 0.02% [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.